

## More practice problems for Exam 2

### To practice the theory

Complete the statement and then prove it: If  $y_{p_1}$  solves a linear ODE

$$Ly = f_1,$$

and  $y_{p_2}$  solves

$$Ly = f_2,$$

then

$$y_p = y_{p_1} + y_{p_2}$$

solves

### Section 2.8 Ex 7

Then, in the sections that were covered, any (relevant) exercise that was not assigned, and examples in the book (we usually do different examples in class than the book).